IN THE CLAIMS

Please amend the claims as follows:

1. (Original) A method of determining at least one expectancy range for a filling level echo or a false echo generated by an ultrasonic or radar filling level measurement device, comprising the following process steps:

identifying at least one filling level echo or false echo from a first filling level envelope curve, the first filling level envelope curve having been generated at a first time;

identifying at least one second filling level echo or false echo from a second filling level envelope curve, the second filling level envelope curve having been generated at a second time different from the first time;

determining at least one expectancy range for a filling level echo or false echo in consideration of the temporal behavior of the identified at least one first filling level echo or false echo and of the identified at least second filling level echo or false echo.

2. (Original) The method according to claim 1,

wherein the method further comprises: identifying at least one further filling level echo or false echo from at least one further filling level envelope curve, said further filling level envelope curve having been generated at a further time different from the first time and the second time.

3. (Original) The method according to claim 1,

wherein the at least one expectancy range is cyclically determined in consideration of the temporal behavior of at least two past filling level echoes or false echoes.

4. (Original) The method according to claim 1,

wherein after each filling level envelope curve newly received by the filling level measurement device, a new expectancy range is determined.

5. (Original) The method according to claim 1,

wherein after n filling level envelope curves newly received by the filling level measurement device, a new expectancy range is determined, whereby applies $n \in \mathbb{N}^*$.

6. (Original) The method according to claim 1,

wherein the method furthermore comprises the following steps:

sampling a filling level envelope curve currently received by the filling level measurement device by an analog-to-digital converter;

storing the echoes of the sampled filling level envelope curve including their echo data in an array of a predeterminable size;

processing the echo data stored in the array with image processing methods;

searching individual echoes in the current filling level envelope curve;

assigning the detected echoes to expectancy ranges determined in the past for a filling level echo or a false echo;

in the case that an echo is assigned to the expectancy range for the filling level, determining the filling level using said echo; and

when the array is occupied by echo data, determining a new expectancy range for echoes to be expected in the future.

7. (Original) The method according to claim 6,

wherein, when the array is occupied by echo data, the expectancy ranges for the filling level and the false echo are determined in consideration of the echo data stored in the array in the past and representing the filling level envelope curves, which echo data could have been assigned to a past expectancy range.

8. (Original) The method according to claim 6,

wherein the echo data is stored in the array including the dimensions location, time and amplitude.

9. (Original) The method according to claim 6,

wherein the expectancy ranges are determined in that the echo data that could have been assigned to a past expectancy range, are approximated with a functional progression, and a deviation measure is determined as compared to said functional progression thus determined, from which a range width may be established for the expectancy range to be determined.

10. (Original) The method according to claim 9,

wherein the functional progression is determined by means of a regression method, a polynomial interpolation method or an approximation method.

11. (Original) The method according to claim 9,

wherein as the deviation measure, a multiple of the standard deviation of the echo data is determined as compared to the functional progression.

12. (Original) The method according to claim 11,

wherein it is established by said multiple of the standard deviation with which probability an echo present in a future expectancy range may actually be assigned to this expectancy range.

13. (Original) The method according to claim 11,

wherein from the gradient of the functional progression for the expectancy range of the filling level echo, the current change of the filling level is determined.

14. (Original) The method according to claim 13,

wherein the size of the array in which the currently received filling level envelope curves are stored, is adapted to the current change of the filling level.

15. (Original) An evaluation means for determining at least one expectancy range for a filling level echo or a false echo generated by a filling level measurement device, wherein the at least one expectancy range is determined in consideration of the temporal behavior of at least two past filling level echoes or false echoes.

16. (Original) The evaluation means according to claim 15,

wherein the at least one expectancy range is cyclically determined in consideration of the temporal behavior of at least two past filling level echoes or false echoes which could have been assigned to past expectancy range.

17. (Original) The evaluation means according to claim 15,

wherein the evaluation means is equipped with a memory, in which each currently received filling level envelope curve is stored after an analog-to-digital conversion with its echo data including the dimensions location, time and amplitude in an array of a predeterminable size.

18. (Original) The evaluation means according to claim 15,

wherein the evaluation means moreover comprises an image processing unit processing the echo data of the filling level envelope curves stored in the array and searching individual echoes present therein.

19. (Original) The evaluation means according to claim 15,

wherein the evaluation means is configured so as to assign the detected individual echoes to expectancy ranges determined in the past for the filling level echo or the false echo, and to determine the filling level from one echo assigned to the expectancy range for the filling level.

20. (Original) The evaluation means according to claim 19,

wherein the evaluation means moreover is configured so as to determine a new expectancy range for echo data to be expected in the future, once the array is occupied by echo data.

21. (Original) The evaluation means according to claim 15,

wherein the evaluation means is configured so as to determine the expectancy ranges for the filling level and the false echo in consideration of the echo data representative of the filling level envelope curves and stored in the array in the past, which echo data could have been assigned to an expectancy range.

22. (Original) The evaluation means according to claim 21,

wherein the evaluation means comprises a signal processing unit determining the expectancy ranges in that said processing unit approximates echo data with a functional progression, which echo data has been assigned to a past expectancy range, and determines a deviation measure of the echo data as compared to the functional progression thus determined.

23. (Original) The evaluation means according to claim 22,

wherein the signal processing unit determines the functional progression by means of a regression method, a polynomial interpolation method or an approximation method.

24. (Original) The evaluation means according to claim 22,

wherein the signal processing unit determines a multiple of the standard deviation of the echo data as compared to the functional progression, as the deviation measure.

25. (Original) The evaluation means according to claim 22,

wherein the size of the array that is stored in the memory of the evaluation unit, and in which the currently received filling level envelope curves are stored, may be dynamically adapted to the current change of the filling level, which change is represented by the gradient of the functional progression.

26. (Currently Amended) The evaluation means according to claim 15,

wherein the evaluation means[[in]] <u>is</u> integrated in a filling level measurement device.

27. (Original) The evaluation means according to claim 15,

wherein the evaluation means is spaced from a filling level measurement device, and is in connection with the filling level measurement device via a data link.

28. (Original) A computer program for determining at least one expectancy range for a filling level echo or a false echo generated by an ultrasonic or radar filling level measurement device, with the computer program including instructions for cyclically determining the at least one expectancy range in consideration of the temporal behavior of at least two past filling level echoes or false echoes that could have been assigned to a past expectancy range.

29. (Original) The computer program according to claim 28,

wherein the instructions carry out the following process steps:

sampling a filling level envelope curve currently received by the filling level measurement device by an analog-to-digital converter;

storing the echoes of the sampled filling level envelope curve including their echo data in an array of a predeterminable size;

processing the echo data stored in the array with image processing methods;

searching individual echoes in the currently filling level envelope curve;

assigning the detected echoes to expectancy ranges determined in the past for a filling level echo or a false echo;

in the case that an echo is assigned to the expectancy range for the filling level, determining the filling level using said echo; and

when the array is occupied by echo data, determining a new expectancy range for echoes to be expected in the future.

30. (Currently Amended) A computer <u>readable medium adapted to be</u> ~~program product~~ directly loadable into the memory of a computer and including instructions for carrying out the following process steps ~~when the product is loaded on a computer~~:

sampling a filling level envelope curve currently received by the filling level measurement device by an analog-to-digital converter;

storing the echoes of the sampled filling level envelope curve including their echo data in an array of a predeterminable size;

processing the echo data stored in the array with image processing methods;

searching individual echoes in the current filling level envelope curve;

assigning the detected echoes to expectancy ranges determined in the past for a filling level echo or a false echo;

in the case that an echo is assigned to the expectancy range for the filling level, determining the filling level using said echo; and

when the array is occupied by echo data, determining a new expectancy range for echoes to be expected in the future.